G. W. IVES.

SHAFT JACK.

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1,274,554.

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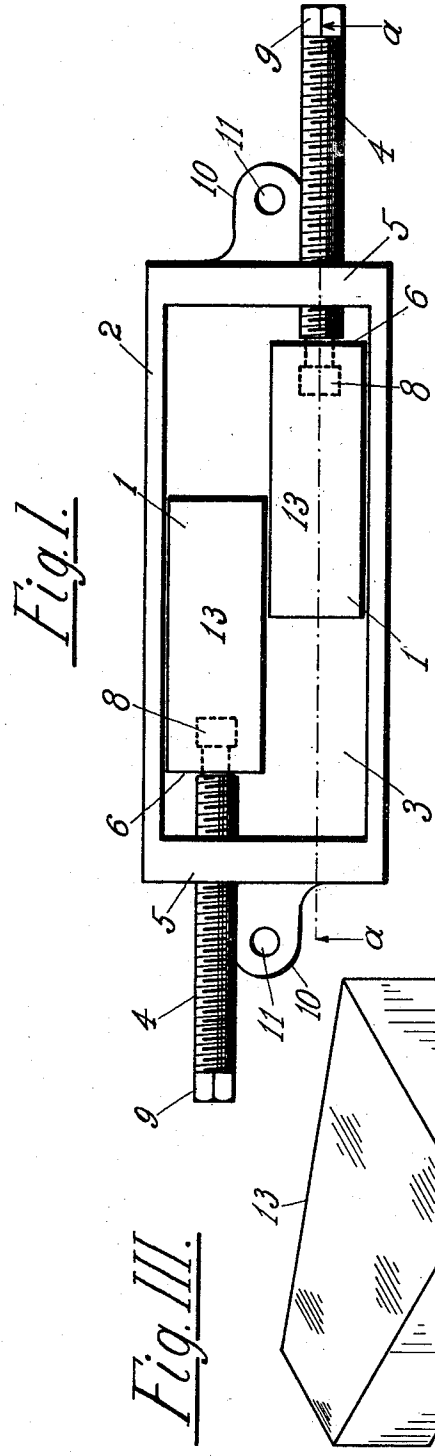


Fig. I.

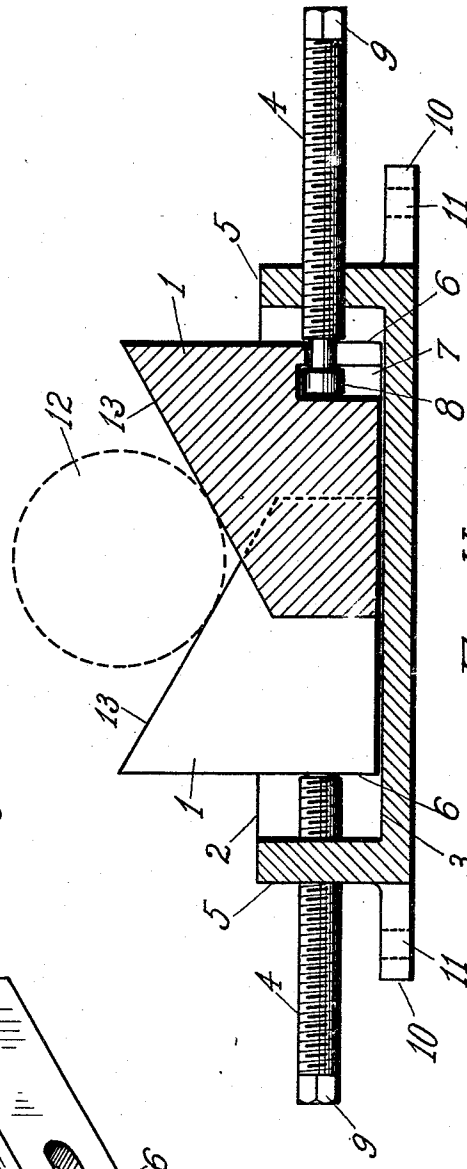


Fig. II.

Fig. III.

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SHAFT-JACK.

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To all whom it may concern:

Be it known that I, GEORGE WENTWORTH IVES, residing at Milwaukie, in the county of Clackamas and State of Oregon, have invented a new and useful Shaft-Jack, of which the following is a specification.

My invention relates to improvements in jacking devices for horizontal shafts, mainly for the purpose of keeping them in proper alinement for babbetting; and the objects of my invention are to provide an apparatus which can be easily and cheaply constructed, and which permits the alinement of the shaft in relation to its bearing with great exactitude.

I attain these objects by the mechanism illustrated in the accompanying drawing in which:

Figure I is a plan view of the entire apparatus; Fig. II, a section of Fig. I, taken along line *a—a;* Fig. III, an isometric view of one of the wedge blocks, particularly with reference to the shape of the slot in its heel.

Similar numerals refer to similar parts throughout the several views.

Wedge blocks 1 1 are placed side by side into the box 2, the bottom 3 of which furnishes the base on which the wedge blocks 1 1 slide back and forth propelled by screws 4 4, which enter the box 2 by its end walls 5 5. The heels 6 6 of the wedge blocks 1 1 are slotted to form a socket 7 for the knobs 8 8 on screws 4 4. The outer terminals 9 9 of said screws are adapted to be operated by means of a wrench or spanner. Lugs 10 10, with their respective holes 11 11, furnish a convenient means of nailing or bolting the box 2 to its groundwork in case it is necessary to guard the box against accidental shifting.

To explain the method of operating my shaft jack we suppose shaft 12 to rest in its unbabbetted bearings and to be in need of babbetting. Before the latter can take place, said shaft must be properly alined. For this purpose a groundwork, usually of wooden blocks, is erected under shaft 12 and near the bearing to be babbetted. No great care in adjusting the height of this groundwork is required, since my shaft jack will do the final adjustment, providing sufficient space is left between shaft and groundwork that box 2 can slip in. Previous to that, of course, the wedge blocks 1 1 have to be taken out of the box. After the box has been placed properly under the shaft, the wedge blocks 1 1 are replaced and the shaft 12, resting in the valley formed by the inclines 13 13, adjusted to the desired position by means of screws 4 4.

Thus it will be seen that my objects have been accomplished; and, though I have shown the preferred form of my invention, I reserve to myself the right to make such minor changes in construction as will not violate the principle of this invention.

I claim:

1. The combination of a flat, rectangular, open box; two removable wedge blocks, trapezoidal inside view, sliding, independently and side by side, on the bottom of said box; two propelling screws, entering the box horizontally and from opposite directions, screwably mounted in the end walls of said box, engaging the wedge blocks and propelling them back and forth within the box.

2. The combination of a flat, rectangular, open box, having horizontally and outwardly extending, perforated ears at the bottom of the box; two removable wedge blocks, trapezoidal in side view, sliding horizontally and side by side on the bottom of said box and having their heels in engagement with screw members; two propelling screws entering the box from opposite directions, screwably mounted in the end walls of said box, their terminals within the box having turned knobs engaging the wedge blocks and propelling them back and forth within the box; substantially as described.

3. The combination of a flat, rectangular, open box; two removable wedge blocks, trapezodial in side view, sliding, independently and side by side, on the bottom of said box; each wedge block having an open slot in its heel, this slot forming a recess to engage with a screw member; the wedge blocks being placed so that the planes of their inclines form a valley at the intersecting line; two propelling screws, entering the box from opposite directions, screwably mounted in the end walls of said box, having turned knobs rotatably mounted in the heels of the wedge blocks, and propelling latter back and forth within the box; substantially as set forth.

GEORGE WENTWORTH IVES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."